

**ABSTRACT OF THE DISCLOSURE****FULL TRANSMISSION CONTROL PROTOCOL OFF-LOAD**

A method and system for a queue identification (QI) system which significantly reduces resources required to identify a process associated with receiving an incoming packet is provided. A QI mechanism is used as a TCP option. During a TCP connection establishment process, QI numbers are exchanged for both a sending port and a receiving port of the connection. After the connection is established, the destination QI's number is inserted in a Transmission Control Protocol (TCP) header on outbound packets.

PCT/US2001/04877